



nnjbees.org



August 2019

NORTHEAST NEW JERSEY BEEKEEPERS ASSOCIATION
A division of the New Jersey State Beekeepers Association

President	Frank Mortimer	201-417-7309	3 rd V. Pres.	John Matarese	201-481-5426
V. President	John Gaut – Mentor Coordinator	201-961-2330	Secretary	Rich Stellingwerf	201-693-2571
2 nd V. Pres.	Jaimie Winters	551-486-7479	Treasurer	Bob Jenkins	201-218-6537

Meeting on: **Friday, August 16th at 7:30 PM**

Location: **Ramapo College of NJ, 505 Ramapo Valley Rd., Mahwah, NJ 07430**

 *Bee Enthusiasts & Bee Curious Always Welcome!*  *Look for the Bee-u-tiful Yellow Signs* 



This Month's Meeting: **The Why's, When's & How-to's for Feeding Bees**





Message from the President:

Dear Northeast NJ Beekeepers,

This month's letter is personal, as I'm writing to share some good news with you...

I have written a 100,000 word, 320 page, 19-chapter nonfiction book. And a few weeks ago I signed a contract with *Kensington Publishing*, making me a soon-to-be published author. Writing a book is something that I'd always dreamed of doing, which is why I'm thrilled to say, "I did it," and that my book has a home at a major publisher.

The title of my book is "*Bee People and the Bugs They Love*" and it is scheduled to publish Summer 2020. While I'm certain you would have guessed that it's a book about bees, please note that it's written for a general audience, as it is NOT a "how-to" beekeeping book.

The full description is:

Bee People and the Bugs They Love will be the first book to spotlight the quirky, offbeat, and eccentric people that are passionately obsessed with the honey-loving bug. It chronicles the adventures and comedic misfortunes of keeping bees through a firsthand account of beekeeping's odd and amusing characters woven together with amazing beekeeping facts and everyday explanations.

Bee People and the Bugs They Love is written to entertain the reader with vivid, first person tales of beekeeping, intertwined with thoughtfully explained honeybee facts, analogies, and details.

Bee People and the Bugs They Love is not a “how to” book. Instead it’s a look inside the avocation of beekeeping, focusing on the cast of characters that keep bees. Each chapter brings to life bee-obsessed and slightly outlandish beekeeping enthusiasts, incredible bee facts, and the often humorous and always entertaining interactions between people and bees.

Bee People and the Bugs They Love follows my personal journey from novice to certified master beekeeper as I lead the reader through the entertaining and science-driven world of keeping bees. The book begins shortly before I stood over my first hive and ends with an account of how keeping bees is now something that my whole family does together.

Bee People and the Bugs They Love is much more than just a book about bees as it focuses on people: the people who willingly choose to hang around with stinging insects.

The events described in the book are real and all of the bee facts are accurate. However, other than family members and a few close friends, names and identifying details have been changed; characters combined, and certain characters are wholly reimagined, supplemented, and are not intended to have any resemblance to actual persons, living or dead.

I am especially proud that our club, the *Northeast NJ Beekeepers Association*, is featured throughout the book, and anyone reading it will get a taste for what makes our club so special. I wrote about what makes beekeepers such wonderful people to know, as my intention was to inspire the reader by sharing my passion for honeybees and all the tasks that goes into caring for them, illustrating what makes beekeepers so special.

I would like to thank all the members of the *Northeast NJ Beekeepers Association*, without you, this book would not have been possible. I hope you will enjoy reading *Bee People and the Bugs They Love* as much as I enjoyed writing it, and that my book will make you even more proud to be a beekeeper.

Bee Well,

Frank Mortimer
President
Northeast NJ Beekeepers

Beekeeping in August

by John A. Gaut

EAS Master Beekeeper

The bees have had a wonderful honey flow this year in northern NJ! If a colony was healthy, they were able to gather plentiful nectar. My bees filled all the supers multiple times and also filled all the comb honey supers; there is some beautiful comb honey in the store now! They even drew out comb on all the supers of foundation. Many beekeepers were very happy with their honey crop this year.

As we get close to Fall, beekeepers need to support the colonies preparation for winter. A colony needs a large population of young healthy bees for winter survival. The beekeeper needs to help the colony raise this population of young healthy bees in two ways. Most importantly by effective Mite Management. Also, the colony needs to be encouraged to continue to raise brood during a dearth. Feeding a colony about a gallon a week of sugar syrup during the dearth will keep the colony in a brood rearing mode. The bees that enable the colony to survive the winter are physiologically different than summer bees. Winter bees have large stores of vitellogenin and will live 6 or more months. Summer bees will naturally die before winter sets in. The colony will have more healthy winter bees if brood rearing is maintained during the late summer and fall.



Frame of honey being prepared for winter stores in the top deep hive box. The shiny uncapped area was brood and is now being “backfilled” with nectar/syrup and being processed into honey for the winter. In the Spring, the cluster will consume this honey and use the area for brood rearing again.



The bees emerging from these cells will enable the colony to survive the winter. Most will not forage but “fatten up” with vitellogenin instead. Their duties will include temperature, humidity and CO2 regulation. They will feed the brood during January, February and March.

Low mite levels are important all year, especially as the colony prepares for winter. The winter bees must not be compromised by parasitic mites and the viruses the mites transmit. Some of the viruses prevent or reduce the ability of the bees to warm the cluster, resulting in a dwindling colony. If the beekeeper is managing mites effectively, the colony has an excellent chance of surviving what ever winter brings. Effective Mite Management is more than treating and hoping for the best. Effective Mite Management is using treatments proven to be effective and then verifying the treatment performed as expected by collecting a sample of bees and using an Alcohol Wash to determine mite levels. I use Formic Pro in late summer to keep the mite levels low. In the fall I use ApiVar to continue to keep mite levels low and control mites immigrating into the colony from neighboring collapsing colonies.

Fall is a beautiful time of year. The bees usually can enjoy plenty of natural pollen and still bring in some nectar to increase their honey stores for winter. The colonies are raising winter bees to enable them to survive the winter and build a new population in the spring. Beekeepers responsibility is to verify the colony is healthy and has the food resources it needs!



UPDATE: BetterBee's New BetterComb
by
Rich Stellingwerf

After last month's meeting, I installed several frames of BetterComb in a few of my hives. For those that are not familiar with the product, it is fully drawn comb made from food-grade, synthetic wax from mineral and plant sources that looks and feels like beeswax.

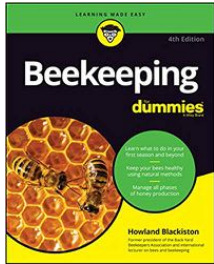
So far, the bees seem to be treating it like ordinary drawn comb. The bees have been storing nectar in all the frames. They have also added their own wax to the frames, securing the comb better to the wood frames. I have not seen the queen lay any eggs in the BetterComb, but that might be more about food storage than her preferences.

While it's still early, so far I am enjoying the product as it appears to be working quite well.

I will continue to follow up with my observations and experiences with BetterComb by BetterBee.



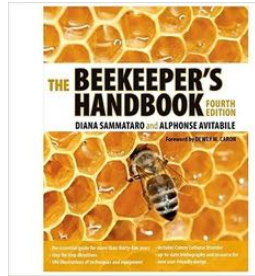
Northeast NJ Beekeepers Bee Books for Sale



Beekeeping for Dummies

An excellent basic intro guide to beekeeping

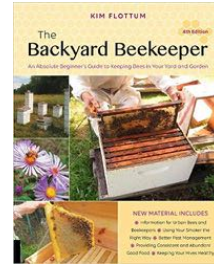
Price: \$20



Beekeeper's Handbook, 4th

If you're only going to buy one book, this is the best guide to the hobby & profession of beekeeping

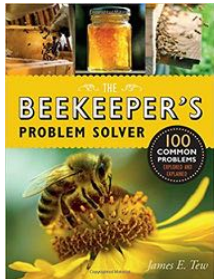
Price: \$25



Backyard Beekeeper 4th

The premiere introduction to backyard beekeeping

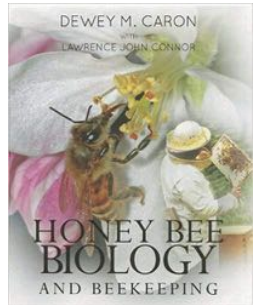
Price: \$20



Beekeeper's Problem Solver

100 Common Beekeeping Problems Explored and Explained

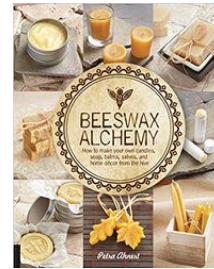
Price: \$20



Honey Bee Biology and Beekeeping

The only beekeeping textbook teaching college students & beekeepers the science & practice of bees & beekeeping

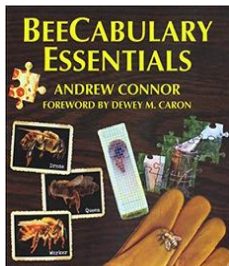
Price: \$45



Beeswax Alchemy

Over 40 DIY projects that's the perfect combo of recipe, craft book, & beekeepers' guide

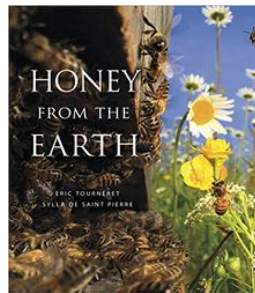
Price: \$20



BeeCabulary Essentials

All the special terminology about bees and beekeeping

Price: \$30



Honey From the Earth

Internationally acclaimed honeybee photographer Eric Tournet spent FIFTEEN YEARS traveling the world to capture the breathtaking diversity of bees and beekeeping traditions on six continents.

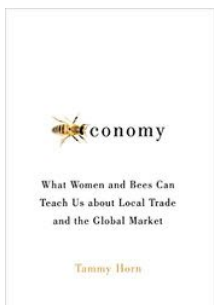
Price: \$50



Backyard Beekeeper's Honey Handbook

More than just a cookbook, it introduces the literal cornucopia of honey varieties available

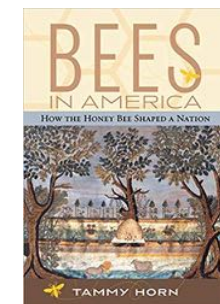
Price: \$20



Beeconomy: What Women & Bees Can Teach Us about Local Trade & the Global Market

Examines the fascinating evolution of the relationship between women & bees around the world

Price: \$20



Bees in America: How the Honeybee Shaped a Nation

Cultural history of bees and beekeeping in the United States, from the colonial period, when colonists first introduced bees to the present

Price: \$20



Better Beekeeping

Takes beekeepers past the beginning stages and offers solutions and rewards for keeping bees a better way.

Price: \$20

All Books are only available to members at our monthly meetings

Christina Grozinger To Headline State Meeting Set For Nov. 9

The Northeast NJ Beekeepers will host this year's state meeting on Saturday, Nov. 9th, 9:15 a.m. to 3:30 p.m. Registration with coffee and light refreshments will begin at 8 a.m.



Speakers include: **Dr. Weiner, Ramapo College** on the Importance of Native Plants; Ramapo students on their bee-related projects; **David Gilley, Department of Biology at William Paterson**. The keynote speaker will be **Christina Grozinger, a distinguished professor of entomology and director for the Center of Pollinator Research at Pennsylvania State University**. She was elected as an Entomologist Society of America Fellow in 2018. Grozinger is internationally recognized for her integrative studies on the proximate and ultimate mechanisms underpinning social behavior and health in bees and for her advocacy for research, education, and conservation of pollinators.

A Roundtable discussion on the The Future of Honeybee Problems/Pests/Pathogens will also be held with **Grant Stiles** of Stiles Apiaries, former state apiarist **Tim Schuler, Gilley and Grozinger**. The meeting will take place at **Pascack Hills High School, 225 W Grand Ave, Montvale, NJ**. Information on cost and registration will be forthcoming. Go to <http://www.njbeekeepers.org/> for details.



By John A. Gaut

Eastern Apiculture Society

2019 South Carolina Conference

The Eastern Apicultural Society of North America, Inc. (EAS) is an international non-profit educational organization founded in 1955 for the promotion of bee culture, education of beekeepers, certification of Master Beekeepers, and excellence in bee research. EAS is the largest non-commercial beekeeping organization in the United States and one of the largest in the world.

EAS publishes its newsletter, *The EAS Journal*, four times a year; sponsors awards to deserving bee researchers and graduate students; and offers research grants for applied research projects.

Every summer EAS conducts its Annual Conference consisting of lectures, workshops, vendor displays, short courses for beginning and advanced beekeepers, Master Beekeeper examinations and an annual business meeting. The conference is held in one of its 26 member states or provinces in the eastern U.S. and Canada. This year, the EAS Conference was held at the Convention Center in Greenville, South Carolina, a spacious building with plenty of room for simultaneous educational sessions, as well as large general sessions. The vendors had plenty of room and were conveniently located to the all the meeting rooms. A temporary apiary was set up next to the center and included a Warré hive, an AZ hive (similar to Slovenian hives), as well as many Langstroth hives. Over 100 volunteers and speakers made the conference educational and enjoyable. Eleven speakers and volunteers were from New Jersey.

The conference week was broken into a Short Course (Monday—Wednesday) and the Main Conference (Wednesday—Friday). The Short Course had tracks tailored for beginners, intermediate, and advanced beekeepers. Popular sessions included queen rearing and honeybee health.

The main conference included speakers from all segments of the beekeeping community: universities, USDA, and commercial beekeepers. Jennifer Berry shared her research with oxalic acid treatments. Jay Evans, USDA Beltsville Lab, highlighted the future of microbials. Mike Gardner shared his 51 years as a commercial beekeeper.

In addition to class sessions and workshops in the apiary, many attendees visited Bee Well Honey Farm, a local commercial beekeeping operation with a local store.



Soap Making at Bee Well Honey Farm



Bee Well Honey Farm Store

EAS offers a rigorous Master Beekeeper Certification process. This year, New Jersey had one successful candidate, Kevin Inglin, pass his last examination. Kevin joins the other ten New Jersey Master Beekeepers.

John Gaut was elected as the New Jersey EAS director of our state on the EAS board, serving for the next four years. He looks forward to representing New Jersey and supporting the new Chairman, Lou Naylor.

The Beekeeping Olympics is a regular event at EAS now. The New Jersey Teams were competitive in all categories: Guess the weight of a hive box, Find the Queen and Build a Frame with only a hive tool.



The New Jersey Team: John A. Gaut, Princess Nicole Medina and Dave Elkner



Most but not all the attendees from New Jersey

Next year's conference, EAS 2020, will be at The University of Maine, Orono, ME, August 3rd - 7. More information can be found at www.easternapiculture.org.

Come and join us next year—the conference is a great way for both beginners and advanced beekeepers to learn more about beekeeping. You will also meet fellow beekeepers from around the world!

A Bee Blessing and Honey Harvest in Rutherford

On July 14, the *Northeast NJ Beekeepers* held a Bee Blessing and Honey Harvest at the First Presbyterian Church of Rutherford, where Northeast NJ Beekeeper Jaimie Winters keeps her apiary in what is called the Peace and Love Garden. Winters, an elder at the church, and her bees have been welcomed at the church and garden for five years.

Every July, church members and the community at large are invited to shower a blessing on the bees and to help with the early harvest, which has become a community-wide tradition. After the blessing by Reverend Pete Wilkinson, the community gets to work uncapping and spinning the honey, resting in between for a picnic of deviled eggs, cucumber sandwiches, fruit salad, bee cupcakes and lemonade. Kids headed to the craft table to color in bee coloring books and make Tie-Dye t-shirts, or hang out at the bee station table with the observation hive learning about bees.

The attendees also got a lesson in and tasting of the four different honeys from light to dark. Northeast NJ Beekeeper members **Vic Tryanowski**, **Robert Vitali**, and **Warren Stroedecke** helped with this year's harvest.



The Sunday school students plant and maintain the garden that bears tomatoes, raspberries, strawberries, peppers, cucumbers, sunflowers and herbs. After a long day of spinning, and on the hottest day of the year, about 50 bee and honey lovers attended the blessing and harvest. They also got to take home the fruits of their labor -- a half-pound bear of "Blessed Bee honey."

You're Invited!

Honey Tasting Competition

September 14 1:00 pm – 4:30 pm
Ramapo College, Mahwah, NJ
Friends Hall, (Room SC219)



Free Admission & Everyone is Welcome!

- ✧ Taste Dozens of Pure Natural Local Honeys!
- ✧ Vote for the 2018 Honey Cup Champion!
- ✧ Free Face Painting for the kids!
- ✧ Live Music by *Dog Food aka The Hive!*
- ✧ Local Honey & Honey-Related Products For Sale!
- ✧ Fun For The Whole Family!

For more information, please email: northeastnjbeekeepers@gmail.com

Beekeeping Memories

“The Ultimate Hive”

By

Karl Schoenknecht

After many years of trial and error beekeepers began to realize that managing honeybees required knowledge of conditions within the hive at various times of the year. With the use of skeps or gum hives (tree log hives) it took many years for beekeepers to learn even a few things about beekeeping. Simple things like bees preferring to store honey above the brood were only discovered by accident or by trial and error. Beekeepers were frustrated that there was no way to save the honeycomb for reuse or for checking the interior honeycomb surfaces to determine hive progress and health. Any work inside a hive resulted in destroying honeycomb and even the hive.

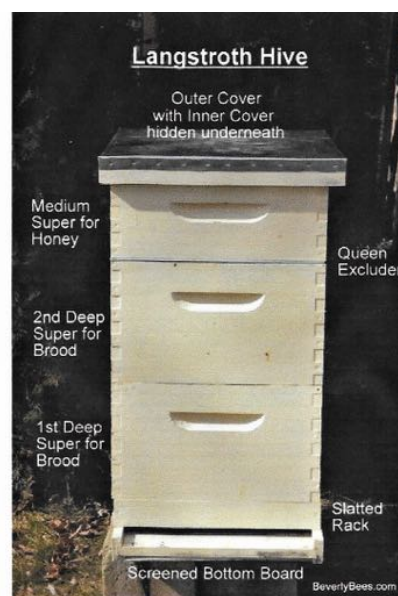
Different types of hives were made, like box hives or top bar hives and later Huber made the Folio hive with frames like book pages but all were soon gummed up with Propolis or stray honeycomb. Later in 1848 Johann Dzierzon a Polish Roman Catholic priest determined that he could notch the inside edge of the hive sides to space top bars and allow his bees to make perfect rows of comb which created a movable honeycomb hive. He later changed the top bars to frames preventing the bees from attaching the comb to the sides of the hive and determined the exact spacing to allow frames of honeycomb to be removed freely without destroying the comb.

This news traveled quickly to other beekeepers but still there were many to choose from. The Bevan removable-top hive in England and the fixed frame Quinby hive in the United States. Beekeepers from poor countries still used the skep and some with knowledge

used stacked skep hives to enable the removal of honeycomb without destroying the brood comb. It was not until 1852 that all the good parts of the many hives were used to make the best beehive.

Lorenzo Lorraine Langstroth was born in Philadelphia on Christmas Day in 1810 and later became an apiarist, clergyman and teacher. He read all the journals and tried the Folio hive by Francois Huber and realized that the bees could be worked without the fear of getting stung. He noted that if the top cover was less than a quarter of an inch from the tops of the frames the bees would glue them together with Propolis. He followed the Dzierzon findings and experimented with the spacing between and around frames which later became known as a “bee space”.

Langstroth later added a bottom board, inner cover, metal top outer cover, wired wax foundation and different size boxes. Deep brood boxes allowed the queen to lay more eggs on a deep frame before moving across to the next frame. Smaller honey frame boxes allowed for easier lifting when full of honey. He added other features and promoted his hive showing others that he could easily examine his hive without destroying the comb. The Langstroth hive soon became the ultimate beehive and is still in worldwide use today.



Many thousands of years ago man discovered the sweet treat found in the wax comb of feral colony honeybees that lived in cliffs or trees. We later found uses for the wax and other products that honeybees used in their hives. As the need for these products increased man tried to learn ways to make harvesting easier and more productive. Unfortunately, hunter-gatherers destroyed the hives when they removed the comb to get the honey. By careful observation of honeybees in the field, man determined that the bees gathered nectar from blossoms to make honey and later stored it in wax combs. Little else was known and studying bees in a closed dark hive was not possible. Even before recorded history our ancestors may have tried to save a hive by leaving the brood and some honey in the gathering basket and turning it upside down to protect it. No clear evidence remains that the skep was invented this way but the skep is still used today in a similar manner by hunter-gatherer tribes in some poor areas of the world.

Skeps, hollow clay-tube hives and log gum hives were early types of beehives that enabled man to keep hives nearer to his home but still did not allow us to study the honeybee in great detail. After the discovery that an alcoholic beverage could be made from honey, the demand for honey increased and yet we could do little to increase production. Years passed with little progress toward understanding the honeybee until Swammerdam (about 1660) was able to use a microscope and prove the king bee was a queen but little else was learned.

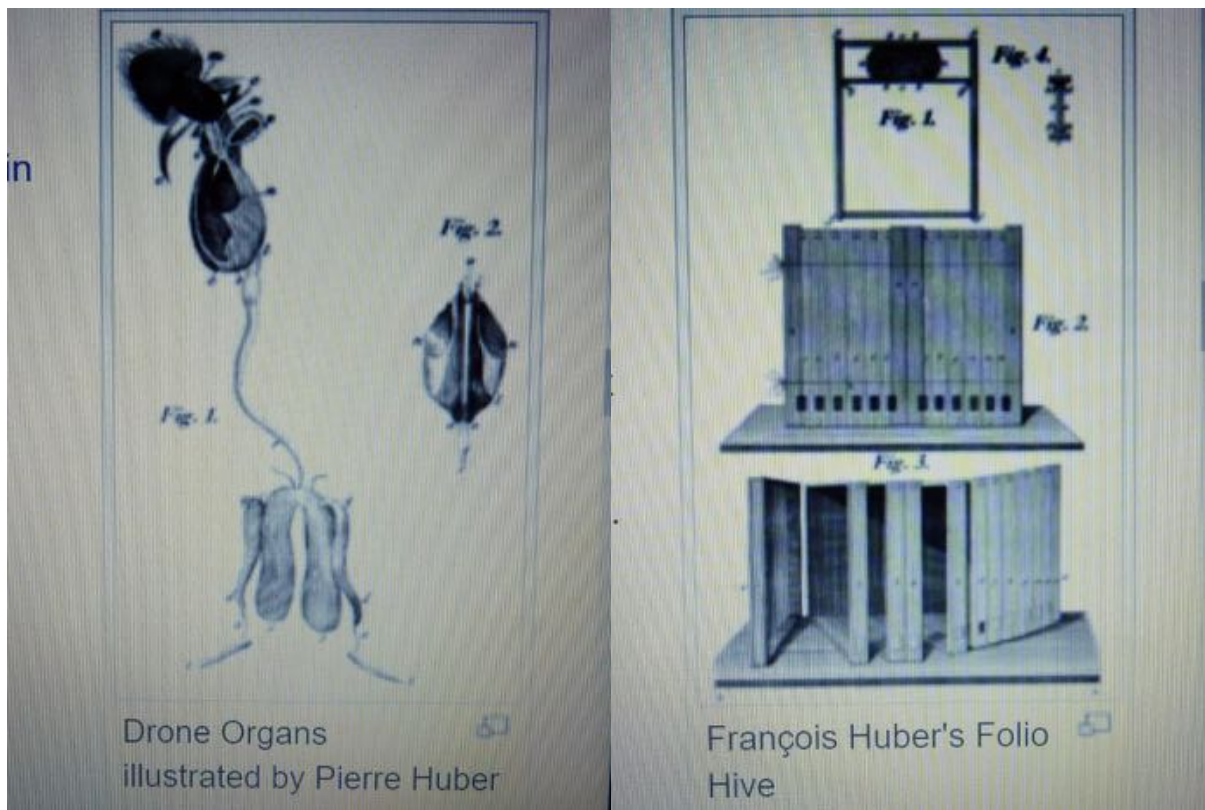
About 100 years after Swammerdam, Thomas Wildman realized that wood bars could be placed on top of a skep and a top cover could be added. He later realized that another skep could be added under the original and found that the bees would only put honey in the top skep after the brood hatched.

Early honey was mixed with crushed larva because there was no easy way to harvest just the honeycomb. Letting the bee larva hatch first was a great bit of knowledge because beekeepers could now remove only honey comb without destroying the hive and let the queen continue working in the lower skep. Beekeepers from many countries started communicating to learn more.

R.A.F. de Reaumur was the first to use glass sides for an observation hive but thanks to the Swiss born Francois Huber the science of beekeeping moved forward quickly. Huber was from a wealthy family and was able to move to a nature preserve in 1860 France after he became blind before the age of twenty. He employed Francois Burnens as secretary and together they built and documented improved glass-wall observation hives and sectional hives (called folio hives) that opened like pages in a book.

Huber learned that bees produced wax from slits in their body, the queen was oviparous and the queen laid eggs that stood upright on the bottom of the brood cells. Huber later taught his son Pierre and dedicated his remaining years to scientific research. He determined that the queen was inseminated outside of the hive due to extensive trial and error testing both inside and outside of the hive.

After many hours dissecting bees under a microscope he determined that the large opening under the queen bee was necessary to receive the large organ of a drone and probably required in-flight insemination to allow the belly to belly mating process. Many early beekeepers including Swammerdam thought queens to be self-fertile. As these early discoveries developed so did beekeeping in the United States.



Photos from Wikipedia

Moses Quinby was one of the few that helped the beekeeping industry grow in the 19th century. He became the president of the North American Beekeepers Association in 1871 and was called the father of commercial beekeeping in the United States. Moses Quinby was born in New Castle, NY in 1810 and later in 1828 moved to Coxsackie in Greene County. He built a wood working business when he managed the Pazzi Lampman sawmill and started making beehives to help bolster his beekeeping. He invented the bellows smoker and built the Quinby fixed frame hive that looked like thick frames held together with his special Quinby clamps. He studied a lot about beekeeping and later taught others about good beekeeping practices. With over 1200 hives he created a good business but due to his Quaker heritage he never patented his inventions or his writings because he felt that God meant for him to share what he learned. One of his noted books is “Langstroth on the hive and the Honeybee-a beekeepers manual”.



Our Facebook Group has **over 1855 fans** from all over the world! It's a great place to connect to other beekeepers, so bee sure check out all the great bee pics, bee stories, and bee info.

Remember: <http://www.nnjbees.org> *is your website!*
Check it for everything Northeast New Jersey Beekeeping!

Next Month

HONEY CUP





The First Rule of Bee Club: Tell Everyone about Bee Club!